



Veterans Health Administration Health Systems Design & Development

Billing Replacement Encapsulation

IB*2*256 Release Notes v1.0

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Revision History

Date	Revision	Description	Author
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Introduction

Overview

The Integrated Billing and Accounts Receivable applications will be replaced by a Commercial Off-The-Shelf (COTS) package from the vendor IDX Corporation. In order to prepare the VistA applications for the implementation of a COTS billing and accounts receivable package, all M references in other VistA applications to IB or AR data or services must be identified, analyzed and provided with a solution so that there is a seamless transition during the COTS implementation.

The API released in this patch (IB*2*256) will be the authorized interface for retrieving insurance information for the patient. With this initial release of the API, the insurance data will be retrieved from the live Legacy IB and AR applications. Upon implementation of the new IDX billing and AR system, the API will retrieve data from the IDX system. From the API user standpoint, we anticipate a seamless transition during this crossover.

Special Features

The special features of the Insurance API provided with this patch are as follows:

- **Flexibility** – The VistA applications retrieving patient insurance information using this API only have to modify their code once. During the implementation of the COTS billing and AR system, the API will be modified to retrieve the insurance information from the COTS data source instead of IB and AR.
There are many possible insurance data fields available for retrieval. All data elements currently used by other VistA applications as well as additional fields are available for retrieval. Please see [Appendix B](#) for field values.
- **Mandatory Error Code** - The API returns error code 101 when the network is too slow or is down. Due to the future addition of the COTS billing package and the anticipated use of the Vitria Interface Engine, there may be network problems at various times during application processing. Therefore, applications that depend upon billing information must be equipped with network error handling. Without network error handling, applications may either hang indefinitely or error out. The new standardized IB API will be programmed to return one error code to indicate a network problem. Each application will need to build a business process around the error message. See [Appendix A](#) for a list of all API error codes.

Example

The process of encapsulation will involve, in part, replacing direct global references in routines with APIs. As an example, consider the following piece of code. This code is designed to retrieve the Insurance Company Name and ID (field 1) of any reimbursable or non-reimbursable insurance for this patient (DFN) as of 02/15/03. This data will be returned in the local array named DATA.

This code also shows an example of checking the error array for a possible network error and killing the DATA array before exiting the function call.

```
;Data Layer
S IBINS=$$INSUR^IBBAPI (DFN,DT,"R",.DATA,1)
;Business Layer
; if data is returned, process as needed
I IBINS>0 S I=0 F S I=$O(DATA("IBBAPI","INSUR",I) Q:I="" D
. S INSCO=+$G(DATA("IBBAPI","INSUR",I,1))
. S INSCONM=$P($G(DATA("IBBAPI","INSUR",I,1)),"^",2)
. continue processing
I `IBINS S INSCO="NO ACTIVE INSURANCE AS OF "_$$FMTE^XLFD(T)
; if error(s) returned, process as needed
I IBINS="-1" D
. ;check error array for DATABASE IS UNAVAILABLE error
. I $D(DATA("IBBAPI","INSUR","ERROR","101")) D
. . ;process DATABASE IS UNAVAILABLE error as needed
. . ;
;kill the data array
K DATA("IBBAPI","INSUR")
```

Specific Requirements

Application Programmer Interfaces (APIs)

INSUR

Name: INSUR; Retrieve insurance information for a patient

Declaration: \$\$INSUR^IBBAPI(DFN,IBDT,IBSTAT,.IBR,IBFLDS)

Description: This API returns requested insurance information for the specified patient, and should be called using an EXTRINSIC call.

Arguments:	DFN	Patient IEN (Required)
	IBDT	Date to check for active insurance, if not specified, the current date would be used. The date must be in the VA Fileman internal format. (Optional)
	IBSTAT	Status Filter, see Appendix A for valid values. (Optional)
	IBR	If passed by reference, insurance information will be returned in this variable. (Optional)
	IBFLDS	If passed, will specify which fields to be returned in IBR, field numbers to be separated by commas. If all fields are desired, then a "*" may be used. See Appendix B for field values. (Optional)

Return Values

This API will return "-1" if an error occurred, "0" if no insurance found based on the parameters of the search, or "1" if insurance was found that meets the parameters specified by the search.

If no insurance information is found, then the IBR("IBBAPI","INSUR",y) array will not be generated.

If no errors occur, insurance is found, and IBR is passed by reference, IBR will contain the insurance array requested in IBR("IBBAPI","INSUR",x,y) = field y data where 'x' is an incremental insurance company count (starting with 1) and 'y' is the field number requested.

If an error occurs, the extrinsic function will return -1 and the error codes and messages will be returned in IBR("IBBAPI","INSUR","ERROR",error code) = error message if IBR is passed by reference. See [Appendix C](#) for a list of error codes and messages.

Other When processing is complete, be sure to kill the value passed in by reference in IBR.

INSUR API Examples

Determination of Insurance Coverage

- 1) To determine if a patient has active reimbursable insurance as of today use the following:

```
>W $$INSUR^IBBAPI(DFN)
1
>
```

- 2) To determine if a patient has active reimbursable insurance as of 1/31/03 use the following:

```
>W $$INSUR^IBBAPI(DFN,3030131)
1
>
```

- 3) To find out if a patient has any insurance with prescription coverage use the following:

```
>W $$INSUR^IBBAPI(DFN,"","AP")
1
>
```

Retrieve Insurance Information

- 1) To get insurance company names of all active policies but not necessarily reimbursable effective 2/15/03, use the following:

```
>W $$INSUR^IBBAPI(DFN,3030215,"R",.DATA,1)
1
>ZW DATA
DATA("IBBAPI","INSUR",1,1)=5^MEDICARE (WNR)
DATA("IBBAPI","INSUR",2,1)=19^BLUE CROSS OF CALIFORNIA
>
```

- 2) To get all insurance data fields for all active policies but not necessarily reimbursable effective 3/1/03, use the following:

```
>W $$INSUR^IBBAPI(DFN,3030301,"R",.DATA,"*")
1
>ZW DATA
DATA("IBBAPI","INSUR",1,1)=19^BLUE CROSS OF CALIFORNIA
DATA("IBBAPI","INSUR",1,2)=123 BLUE LANE
DATA("IBBAPI","INSUR",1,3)=LOS ANGELES
DATA("IBBAPI","INSUR",1,4)=6^CALIFORNIA
DATA("IBBAPI","INSUR",1,5)=91532-4329
DATA("IBBAPI","INSUR",1,6)=213-555-3928
DATA("IBBAPI","INSUR",1,7)=1^PRIMARY
DATA("IBBAPI","INSUR",1,8)=19^FEP
DATA("IBBAPI","INSUR",1,9)=1^YES
```

Release Notes

```
DATA("IBBAPI","INSUR",1,10)=3000101
DATA("IBBAPI","INSUR",1,11)=
DATA("IBBAPI","INSUR",1,12)=P^PATIENT
DATA("IBBAPI","INSUR",1,13)=VETERAN,JOE W
DATA("IBBAPI","INSUR",1,14)=XEH123456789
DATA("IBBAPI","INSUR",1,15)=0^NO
DATA("IBBAPI","INSUR",1,16)=1^YES
DATA("IBBAPI","INSUR",1,17)=1^YES
>
```


Appendix A

Valid Insurance Status Filters

The IBSTAT filter parameter can be used if you wish to screen on insurance status. If this parameter contains a value or set of values, then the insurance information will be returned in the resulting array set. Request more than 1 value in the filter by including the letters in the string (i.e. IBSTAT="ARI"). A null or undefined value will result in the default status being used. Active insurance is determined by date of care being equal to or greater than the effective date and equal to or less than the expiration date. If there is no expiration date, then active insurance is calculated using only the date of service and the effective date.

In the case where more than one filter parameter is used (i.e. IBSTAT="POI"), the insurance returned will have a value of at least one of the following: Pharmacy, Outpatient or Inpatient coverage.

Insurance Status Filter value	Insurance Status Description
A	Active and Inactive insurance included, default is active insurance only ** Active insurance is defined as follows: Effective Date < IBDT (default = today's date) < Expiration Date (if any)
R	Reimbursable and Non-reimbursable insurance included, default is reimbursable insurance policies only
P	All insurance policies that have Prescription coverage, default is all active insurance policies with any coverage
O	All insurance policies that have Outpatient coverage, default is all active insurance policies with any coverage
I	All insurance policies that have Inpatient coverage required, default is all active insurance policies with any coverage

Appendix B

API – Fields for Insurance Company Data Return

ID	FIELD NAME	DATA TYPE	Format or Valid Values	Description	Examples of Returned Data
1	INSURANCE COMPANY NAME	REFERENCE and TEXT	ID^name	The name of the insurance company	150^BLUE CROSS OF CALIFORNIA
2	INSURANCE COMPANY STREET ADDRESS	TEXT	Free Text	The Street Address of the Insurance Company	123 HERE LANE
3	INSURANCE COMPANY CITY	TEXT	Free Text	The City of the Insurance Company	SAN FRANCISCO
4	INSURANCE COMPANY STATE	REFERENCE and TEXT	ID^name	The State of the Insurance Company	6^CALIFORNIA
5	INSURANCE COMPANY ZIP	TEXT	Free Text	The ZIP code of the Insurance Company	94114-0123
6	INSURANCE COMPANY PHONE	TEXT	Free Text	The Phone Number of the Insurance Company	415-555-1234
7	COORDINATION OF BENEFITS	NUMERIC and TEXT	ID^name		1^PRIMARY 2^SECONDARY 3^TERTIARY
8	POLICY NAME	REFERENCE and TEXT	ID	The insurance policy name	19^FEP
9	POLICY REIMBURSABLE	NUMERIC and TEXT	ID^name	Is the insurance policy reimbursable	0^NO 1^YES
10	EFFECTIVE DATE	DATE	YYMMDD	The effective date of the insurance policy	3021215
11	EXPIRATION DATE	DATE	YYMMDD	The expiration date of the insurance policy	3030131
12	SUBSCRIBER RELATIONSHIP	ALPHA	ID^name	This is the relationship of the insured to the patient	P^PATIENT S^SPOUSE O^OTHER
13	SUBSCRIBER NAME	TEXT	Free Text	This is the name of the subscriber	SMITH,MARY JO
14	SUBSCRIBER ID	TEXT	Free Text	The subscriber's ID number	XDA999999999
15	PHARMACY COVERAGE	NUMERIC and TEXT	ID^name	If the insurance policy covers medications	0^NO 1^YES
16	OUTPATIENT COVERAGE	NUMERIC and TEXT	ID^name	If the insurance policy covers outpatient services	0^NO 1^YES
17	INPATIENT COVERAGE	NUMERIC and TEXT	ID^name	If the insurance policy covers inpatient services	0^NO 1^YES

Appendix C

Error Codes and Associated Messages

101	DATABASE IS UNAVAILABLE
102	PATIENT ID IS REQUIRED
103	INVALID FIELD LIST
104	INVALID EFFECTIVE DATE
105	INVALID INSURANCE STATUS FILTER
106	INVALID PATIENT ID
107	INVALID COMBINATION, YOU CANNOT USE "A" WITH A DATE